AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. **(Currently Amended)** A method for analyzing a network, comprising:

processing a data trace captured from the network to determine a network topology, including:

determining whether a loop is present; and

detecting a switch;

processing the data trace to determine errors in a network conversation;

processing the data trace to determine at least one metric for the network conversation; and

displaying an interface screen to the user, the interface screen comprising a graphical topology representation, a determined error representation, and a representation of at least one determined metric,

wherein displaying the determined error representation further comprises highlighting a portion of a metric graph that corresponds to a particular error when a user selects the particular error.

2. **(Original)** The method of claim 1, wherein displaying further comprises providing a link in the interface screen wherein a user may select devices in the determined network topology and link to a second display to view errors corresponding to the selected devices.

3. **(Previously Presented)** The method of claim 1, wherein displaying further comprises:

allowing a user to select an analysis duration within the data trace in the interface screen;

processing the data trace for the selected analysis duration to determine a state of each device in the network topology for a predetermined number of intervals in the analysis duration; and

displaying at least one error and at least one metric for the analysis duration.

4. **(Original)** The method of claim 1, wherein displaying the determined error representation further comprises linking to a detailed error description in a second display when the user selects a particular error.

5. **(Canceled)**

6. **(Currently Amended)** A method for analyzing a network and displaying analysis results to a user in an interactive display, comprising:

capturing a data trace from the network with at least one analyzer;

processing the data trace to determine a topology of the network including determining whether a switch is present on a channel along with a position of the switch in the network;

processing the data trace to determine the presence of errors in communications between devices in the network topology;

displaying a graphical user interface to the user, the graphical user interface comprising a first display screen containing a graphical representation of devices detected in the network topology; and

linking the user to a second display screen containing errors determined in association with a particular device in the topology when the user selects the particular device in the first display.

7. **(Canceled)**

8. **(Canceled)**

9. **(Previously Presented)** The method of claim 6, further comprising linking the user to a third display screen having a description of a particular error when the user selects the particular error on the second display screen.

10. **(Previously Presented)** The method of claim 21, wherein displaying metrics comprises highlighting a portion of the displayed metrics corresponding to the particular error.

11. **(Original)** The method of claim 10, further comprising allowing the user to define a viewing duration and redisplaying the metrics using the user defined duration.

12. **(Original)** The method of claim 11, wherein redisplaying the metrics further comprises recalculating a state of each device in the network for a plurality of intervals within the user selected duration and displaying the metrics for each of the intervals.

13. **(Previously Presented)** The method of claim 6, wherein the processing steps further comprise filtering the data trace to eliminate invalid data prior to determining the topology or error lists.

14. **(Currently Amended)** A method for analyzing a network and presenting the network analysis to the user, comprising:

determining a network topology including determining whether a loop switch, stealth public loops, and private loops are on a channel of the network;

determining communication errors between devices in the network topology;

determining at least one communication metric;

displaying the determined network topology to the user; and

providing links between each device in the determined topology and determined errors corresponding to each device, each link operating to display a screen illustrating a description of the error for the device and the location of the error in the network topology.

15. **(Original)** The method of claim 14, wherein determining network topology comprises analyzing a network data trace for device indicators.

16. **(Original)** The method of claim 14, further comprising displaying the at least one communication metric in a graph.

17. **(Original)** The method of claim 14, further comprising providing a selection window for the user to select an analysis duration, recalculating the errors and metrics for a

plurality of intervals in the analysis duration, and displaying the errors and metrics for the analysis duration to the user.

18. **(Original)** The method of claim 14, wherein determining a network topology and determining communication errors further comprises filtering trace data for invalid communications.

19. **(Original)** The method of claim 18, further comprising determining the topology, network errors, and the metrics based on the filtered trace data.

20. **(Original)** The method of claim 14, further comprising providing a selection window where the user can select metrics for inclusion in a graphical representation of the metrics.

21. **(Previously Presented)** The method of claim 9, wherein displaying a graphical user interface further comprises displaying metrics for the communications between devices in the network topology.